

# MOOC Makers: Professors' Experiences With Developing and Delivering MOOCs

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Article abstract

Massive open online courses (MOOCs) have been described as purposeful educational resources for teaching, open educational initiatives, competency-based learning, and the like. They have also been described as an agent of higher education's deterioration. Although MOOCs are often discussed in terms of their current and future usefulness, or lack thereof, in higher education contexts, very little data exists on professors' experiences creating and teaching these courses. Therefore, I conducted a qualitative study, more specifically a phenomenography, to examine professors' experiences with developing and teaching a MOOC. Data include their thoughts on why they decided to teach a MOOC and the benefits and challenges associated with making and teaching a MOOC.

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## MOOC Makers: Professors' Experiences With Developing and Delivering MOOCs



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### Abstract

Massive open online courses (MOOCs) have been described as purposeful educational resources for teaching, open educational initiatives, competency-based learning, and the like. They have also been described as an agent of higher education's deterioration. Although MOOCs are often discussed in terms of their current and future usefulness, or lack thereof, in higher education contexts, very little data exists on professors' experiences creating and teaching these courses. Therefore, I conducted a qualitative study, more specifically a phenomenography, to examine professors' experiences with developing and teaching a MOOC. Data include their thoughts on why they decided to teach a MOOC and the benefits and challenges associated with making and teaching a MOOC.

*Keywords:* teaching, MOOC, online teaching, online learning, OER, distance education

## Introduction

Massive open online courses (MOOCs) have been both extolled and condemned in higher education. Consider the disparate MOOC parties as food “camps.” One camp says that MOOCs have some nutritional value, that there is the potential for sustenance through the materials and the methods of MOOCs. For the other camp, MOOCs are the cotton candy of higher education—a swirl of sugary goodness that may attract some with its puffy sweetness, but that dissolves on contact and has no real nutritional value. Cormier and Siemens (2010) emphasized the positive aspects of open courses, stating, “Online open courses allow for innovation in how educators prepare to teach, how learners negotiate knowledge from the information they are encountering, and how courses can have an impact on the broader field of study” (p. 32). Lesko and Hollingsworth (2013), however, indicated that the openness of open courses proves problematic for some, as there may be concerns about content ownership. Several companies, higher education institutions, and professors, seemingly undaunted, persist with the creation and delivery of MOOCs.

### Purpose

The purpose of the current study is to provide empirical data on instructors' experiences with creating and teaching MOOCs. Each participant was involved in developing the MOOC that s/he taught. The research question is the following: What are the various lived experiences of professors who teach massive open online or open access courses? Current literature provides more and more information about MOOC learners. For example, researchers have published data related to learners' completion of MOOCs (Pursel, Zhang, Jablow & Velegol, 2016), and another recent study indicated that 60% of “paying users” earn certificates for MOOCs and that a number of MOOC participants are teachers (Chuang & Ho, 2016). Researchers have also noted the time it takes for a portion of the 4.5 million (so far) MOOC users to earn a certificate (Chuang & Ho, 2016; Straumsheim, 2017). However, although there are several blog posts and personal reflections available on instructors' experiences with MOOCs, there is very little empirical data related to the experiences of the instructors who create MOOCs. Liyanagunawardena, Adams, and Miller (2013) stated that the lack of data on those who instruct or deliver MOOCs represents a missing component in the literature on massive open online courses, and that is still the case today. While some faculty members are intrigued, and even excited, about the idea of MOOCs, others are fearful about the continued use of massive open online courses (Kolowich, 2013). Empirical research on faculty members' experiences teaching MOOCs is quite limited. Therefore, the current qualitative study, a phenomenography, focuses on the variations of faculty members' experiences with creating and teaching MOOCs.

## Background Literature

Although there is still quite a lot to learn about the creation and delivery of massive open online courses, there have been numerous conversations about MOOCs since the creation of Stanford's Artificial Intelligence (AI) open course.

Several works, for example, have examined MOOC pedagogy. In Clara and Barbera's (2013) work, they discussed what they termed the “problematic pedagogy” of MOOCs through cultural psychology (p. 129). They also continued a conversation about xMOOCs, which do not seem to emphasize pedagogy, and

cMOOCs, which do seem to emphasize pedagogy (Clara & Barbera, 2013; also see Siemens, 2012). However, some current offerings of xMOOCs seem to take on a few characteristics typically associated with cMOOCs (see Blackmon & Major, 2017). Like Clara and Barbera (2013), Rhoads (2015) also addressed the pedagogical distinction of cMOOCs and xMOOCs in his book on MOOCs in higher education. Clara and Barbera indicated that cultural psychology can be instrumental in developing pedagogy for MOOCs.

MOOC learners are, understandably, a very important topic of MOOC literature. Kop, Fournier, and Mak (2011) discussed pedagogy and MOOCs, but they specifically investigated support for MOOC participants. Rodriguez (2012) also talked about, to some extent, the experiences of MOOC learners. Graham (2012) discussed learners and MOOCs, but from quite a different angle. He expressed the idea that MOOCs, even though they are touted by some of the nation's leading institutions, could potentially harm students who are already experiencing challenges in the traditional classroom. Veletsianos, Collier, and Schneider (2015) examined more in-depth interactions of learners in MOOCs: their use of social networks outside of the course, their processes for note taking, and their consumption of the MOOC content. Zhenghao et al. (2015), in their study of Coursera students, found that learners enrolled in MOOCs for reasons related to education and careers.

Some texts address the experiences of MOOC participants while also discussing the experiences of MOOC instructors. One such example is Blancato and Iwertz's (2016) study on a rhetorical composition MOOC. Like previous studies on MOOC participants' experiences, the text explored learners' perspectives on various aspects of the MOOC; however, Blancato and Iwertz also noted that this particular MOOC experience allowed students to teach each other as well as faculty. The learning experience was one that explored both the student and faculty roles in MOOCs and how those roles can be distributed across a course to allow participants and teachers to simultaneously occupy both of the aforementioned roles.

MOOC instructors have also written reflective works to chronicle their experiences teaching these types of courses. For example, Comer (2014) noted being encouraged to keep a journal during the process of creating and teaching a MOOC, so the text addresses everything from making videos to managing students' concerns on the course discussion board. Journals and blog posts can provide helpful information on some of the instructional benefits and challenges related to MOOCs.

There are empirical studies available on instructional aspects of MOOCs as well. For example, in addition to investigating students' motivations for taking MOOCs, Hew and Cheung (2014) also looked at professors' motivations for delivering MOOCs in their review of MOOC research. Margaryan, Bianco, and Littlejohn (2014) chose to examine a different instructional aspect of MOOCs and focused on the quality of instruction in several MOOCs they selected randomly. However, as MOOC enrollment continues to grow and change, researchers should also continue to investigate the evolving experiences of learners as well as those of instructors. There are many professors involved in the creation of MOOCs, and learning more about their experiences with the creation and delivery of these courses could inform the current and future conversations in higher education regarding MOOCs. As noted in some of the aforementioned works, MOOCs carry both benefits and drawbacks, and hearing from faculty members who created and taught these courses will provide much needed qualitative data on many of the celebrated and concerning aspects of massive open online courses.

## Theoretical Framework

The framework for the current study is social constructivism. In a work by Woo and Reeves (2007), they used social constructivism when interpreting interactions in “web-based learning” (p. 16). For the current study, social constructivism plays a large role, too, in that the MOOC environment has multiple layers and multiple contexts. Faculty members who create and deliver MOOCs have the added context of the “massive” part of the MOOC experience. Assignments and ideas that may have worked well for a face-to-face or online class of 25 will have to be adjusted for a MOOC of 2500. Even learners who are accustomed to introductory courses with 200 or so students will have to adjust to a classroom with thousands of students, potentially. The technology itself is one context, and the scale of the course is another, very different, context. In their study of online community, Shackelford and Maxwell (2012) used social constructivism to frame their work. They noted that in social constructivism, “The role of the educator is to establish an environment in which active participating between and among learners and the instructor can occur” (Shackelford & Maxwell, 2012, p. 229). In a massive open online class, the scale of the course is an integral part of the environment, and by extension, affects the co-construction of knowledge and the context for student-student and student-professor interactions. The current study seeks to examine the variations of professors' experiences with teaching MOOCs, and since those experiences are arguably socially constructed, social constructivism is the theoretical framework for this study.

## Methods

I chose to conduct a qualitative study because I was interested in participants' stories. In a number of instances, MOOC research relies on quantitative data because of the sheer number of people. However, devoting time and empirical work to the stories of participants, their voices through their own words, is the business of qualitative research (Creswell & Poth, 2018) and a valuable, worthwhile endeavor. More specifically, my study is a phenomenography (Marton, 1981), a variation of a phenomenological study (Savin-Baden & Major, 2013), and the research question for this study is as follows: What are the various lived experiences of professors who teach massive open online or open access courses? According to Savin-Baden and Major (2013), phenomenography highlights the variations of participants' lived experiences and is often used in educational research on teaching and learning. Although my study presents various cases in the form of each participant's experience, the current study is not a case study because it is not bounded and does not present a unique case (Merriam, 1998; Creswell & Poth, 2018). The combination of creating and teaching a MOOC is no longer a unique endeavor, but it is an understudied one, at least from the perspective of instructors' qualitative experiences. I chose phenomenography because I wanted to highlight the variations of the lived experiences of those who create MOOCs and go on to teach the MOOCs they create. The research question was broadly framed in order to capture as much information about the MOOC teaching experience as possible, but from a very specific group of participants: those who created the MOOCs they taught. Because my study is an education study of faculty members' myriad experiences with developing and teaching MOOCs/open access courses, phenomenography is an appropriate methodological approach.

Other researchers have also employed phenomenography to explore issues related to teaching and learning in higher education. For example, Goh's (2013) phenomenographic study examined pre-service teachers' “conceptions of competency” (p. 1). Goh chose phenomenography “because of its potential to capture

variation of understanding, or way of constituting, conceptions of competency” (p. 3). She interviewed 18 “beginning teachers” with the goal of “report[ing] the variation that emerged from [their] understanding of the phenomenon,” which was competency (p. 3).

Parmaxi, Kyriacou, and Stylianos (2013) conducted a phenomenography on the attitudes teachers and learners had toward computer-assisted language learning. They conducted semi-structured interviews with 15 undergraduate students and 12 language teachers.

## Participants

After receiving IRB approval, over 20 potential participants were contacted for this study, and 8 professors agreed to participate in the study. Phenomenography is a variation of phenomenology (Savin-Baden & Major, 2013), so my number of participants falls within the acceptable range for phenomenological works, which can be from 5 to 35, and in some cases larger or smaller depending on the goals of the phenomenological work (Creswell & Poth, 2018). The participants were either assistant or associate professors at colleges and universities across the United States. Tenure-track or tenured assistant, associate, or full professors who had created a MOOC and taught the MOOC they created were specifically targeted for this study, as the experiences of adjunct or clinical professors may be markedly different from the experiences of professors who have some experience with the tenure process and its impact on teaching opportunities. For example, several professors may teach MOOCs “out-of-load,” or as an addition to their requisite departmental courses. The conversation about “in-load” or “out-of-load” courses affects tenure and post tenure review. Therefore, the current study will leave room for those types of conversations among a participant pool of faculty members who have some experience with tenure or post tenure review. The experiences that adjuncts and clinical professors have with MOOCs are equally valuable, but would involve a separate set of circumstances that would work well for a separate study. The following chart shows the list of participants, the colleges or schools where their courses were or would have been taught (“would have been taught” because some participants taught their courses through third-party providers), and the number of students in the MOOC:

Table 1

### *List of Study Participants and Course Information*

<b>Participants</b>	<b>College where course was/would be offered</b>	<b>Number of MOOC students enrolled</b>
Participant 1	College of Business	1,500-2,000 (first offering); 500 (second offering)
Participant 2	College of Arts and Sciences	about 8,000
Participant 3	College of Arts and Sciences	3,000

Participant 4	College of Arts and Sciences	2,500-3,000
Participant 5	College of Engineering	55,000
Participant 6	College of Engineering	1,700
Participant 7	College of Arts and Sciences	35,000
Participant 8	College of Engineering	40,000-50,000

### Data Collection

Interview data were collected using a combination of face-to-face and virtual approaches. Face-to-face interviews were logged with a hand-held tape recorder, and virtual interviews were recorded via Adobe Connect. All interviews were transcribed verbatim and did not include identifying information about participants (names, institutions, courses, gender, or MOOC platform) in order to maintain strict confidentiality. The data were deleted from the handheld recording device and Adobe Connect upon completion of the study.

### Data Analysis and Trustworthiness

Data were coded and analyzed according to Marton (1986), which included reading the transcripts, highlighting quotes that responded to the research question, closely examining the meaning of the quotes for “significant differences” that could lead to what Marton referred to as “pools of meaning” across data, connecting similar quotes, and forming themes based on the quotes (p. 43). I read each transcript and highlighted the quotes that answered the research question. Next, I carefully explored the meanings of the quotes and noted the “significant differences.” These differences led to “pools of meaning,” and those pools of meaning across quotes became the themes for the study—noted in the Findings section of this paper.

Creswell and Poth (2018) recommended several “validation strategies” (p. 259) and suggested that researchers use at least two of the strategies listed. The current study included member checking and explication of “researcher bias” (Creswell & Poth, 2018, p. 261) as trustworthiness measures. The discussion of researcher bias is addressed in the following Researcher Positionality Statement.

### Researcher Positionality

The impetus for the current research comes from my own experiences teaching MOOCs. For example, in negotiating the responses and valuable contributions of the little over 100 participants connected to my graduate-level, non-credit-bearing course, I wondered how other faculty members, with far more students, handled their MOOC-teaching experiences. I wanted to make sure that my experiences with MOOCs were not conflated with study participants’ experiences, so I focused on an open-ended approach to my

interactions with participants. I also ended the interviews by asking participants what other information they would like others to know about teaching a MOOC, to ensure that my perspectives and direction did not inhibit or minimize participants' contributions. In a larger context, I noticed that a lot of the literature related to teaching MOOCs resided in areas of scholarship on reflections or on blog posts, and extant literature (see, for example, Liyanagunawardena et al., 2013) confirmed that observation. Those contributions are useful, but I saw an opportunity to provide empirical data on instructors' experiences with MOOCs, helping to address a gap in the literature. My approach to the work as an opportunity to share instructors' perspectives helped me to focus on participants' contributions.

## Results

Participants expressed a number of viewpoints on their experiences with developing and delivering MOOCs, and as noted in Marton (1986), participants' quotes were used to develop themes. The four major themes for the current study include the following:

1. Reasons for teaching a MOOC.
2. Benefits of teaching a MOOC.
3. Challenges of teaching a MOOC.
4. Implications for other types of courses.

### Reasons for Teaching a MOOC

The "Reasons for Teaching a MOOC" theme is based on what participants noted as the initial impetus for developing and teaching a MOOC. Participants indicated three reasons for moving forward with MOOCs: altruism, research exposure, and the opportunity to experiment with new technology.

Several participants noted that they wanted to teach a MOOC for altruistic reasons, such as providing content to people in areas who did not have access to such content. For example, Participant 2 stated:

But more than that was the idea of it being an opportunity to reach out to a lot of people who don't necessarily have access [to the specific content for the course]. ...In fact, I should say it has turned out to be completely like that. I mean, I hear from people all over the world, pretty constantly, who are gratified that they have access to this, so it was for both ego reasons and social reasons, social justice reasons, I guess you could say, that I was attracted to the idea.

Along with altruistic reasons, however, participants also explained that MOOCs provided an opportunity for them to extend their research to larger audiences. Participant 5 mentioned research exposure connected to offering a MOOC and noting connections to:

promoting my specific research field and the view that my community has of how to do [work in the participant's area]—in terms of promoting my research group and my field of study and my



university. So--the opportunity to offer it to tens of thousands of students was very compelling as well, and I think the rewards from that have been significant.

The opportunity to experiment with new technology motivated some participants to develop and teach a MOOC. Participant 3 said:

I was, I guess I was primarily interested in the new format. I've been teaching for a long time...so I see the kids as bored with PowerPoint for lectures as I am, so I was interested in broadening my toolkit, trying something different. I was interested in technology and education...So, I'm interested in new formats, new approaches to higher education instruction.

It is important to note that each participant mentioned that their institutions or third party providers initially approached them about developing and teaching a MOOC. The fact that institutions and organizations approached them was consistent among all participants, but the reasons for their being approached varied. While being asked to have a course available for anyone in the world, and by extension represent the institution to those constituents, is an honor, there may be underlying implications associated with agreeing (or not agreeing) to teach a MOOC when asked—a topic that will be addressed in the Implications section of this paper.

### **Professional Benefits of Teaching a MOOC**

Participants highlighted benefits MOOCs held for them and for their students. Many people from local communities and around the world accessed the participants' MOOCs, and as a result, participants reported opportunities to show leadership in their fields and more exposure for their areas of research as professional benefits for teaching MOOCs.

Participant 2 stated:

I got a call from, I think it was actually the vice president of [my institution] wanting to just find out more about what I was up to and all of that. I've been through something in a kind of early stage that my university is interested in, so I'm a resource there, too.

Developing and teaching the MOOC gave Participant 2 an opportunity to provide leadership on his/her campus related to this developing instructional form. Participant 2 also received public recognition, outside of the institution, related to the MOOC. Participant 4 mentioned a type of public recognition as well, stating:

I was, frankly, amazed at how many people signed up for the course and where all they were coming from. I was floored by it. And so, not that long ago I gave a talk overseas about the class, and people over there had already taken it. I don't know how many people in that conference who knew who I was through this class...

The MOOC provided widespread recognition for Participant 4, which, in turn, provided widespread attention for the participant's institution, and potentially, area of research.

Participants did not necessarily agree to teach a MOOC with these benefits in mind, as evidenced by Participant 4's surprise that so many people were familiar with the MOOC at a conference, but there were professional benefits to some of the professors (and again, the universities, by extension) who decided to develop and teach a MOOC. As with any endeavor, just as there are benefits, there are also challenges.

### Challenges of Teaching a MOOC

The major challenges with teaching a MOOC mirrored some of the same challenges discussed in research about online courses in general: technology and time. Although several of the participants were excited about a new form of teaching, the recording, uploading, and editing associated with the videos for their courses took a lot of time, and in some cases, almost required that they acquire new skills in video production. Many participants saw teaching a MOOC as a learning experience, but even when the challenges with technology could be subsumed under the category of "learning experience," the time constraints in particular were quite pronounced.

Some of the professors taught MOOCs "out-of-load," which means that they had other required courses they were teaching, and the MOOC did not count as one of those courses.

**Time and technology.** Participant 1 expressed some of those challenges, saying, "Well, early on the challenge was that there just wasn't a whole lot of support. In other words, I didn't have a camera crew standing ready to record me, so it was very, very time consuming." Participant 1 also indicated that making the course content more manageable, especially when creating shorter videos, was a significant time commitment as well.

Participant 8 shared:

In some sense the biggest challenge was the immense amount of time it takes to get the materials in good enough shape and your lectures sufficiently well-organized that they will be effective at scale. When you have that many students relying on your materials, they have to pretty much be perfect, and that demands a level of polish that's not always necessary--in classroom only sessions, you can sometimes get away with an occasional mistake here or there or homework assignment that doesn't quite work out the way the instructions say that it will--with a MOOC...it's a really bad day when that happens. So, probably the biggest challenge, what I remember most, is just the amount of time. It was like having two jobs.

Much like the other participants, Participant 8 highlighted time as a significant challenge related to MOOC development. However, Participant 8 also noted editorial issues as well. Although Participant 8 did not indicate finding the technology and time connected with working with technology particularly time consuming, the participant did point out how important it was to have the course material "pretty much... perfect." All of the participants in the study are experts in their fields, but in an environment that makes use of other materials for instruction, materials that will be viewed by students and colleagues around the world, there is a legitimate concern about having those materials look polished. Participant 5 stated:

What was a concern, you know the style of teaching online is very different than what you do in the classroom for many reasons, and so I can talk about those in depth but the conclusion is that

you pretty much have to develop all of this material from scratch, and you're teaching in such a different way that you're not getting feedback along the way--you have to do so much reparation to make sure you're gonna be really good on camera. It's like starting over as a teacher, and that was very time consuming and difficult. I'd say that was the hardest thing.

Again, it is not that the participants did not understand the technology—several of them did; the challenge is that technology allows their teaching to happen in a very different way with a

MOOC, and concerns that may not have been present in face-to-face or more traditional online environments are now present in a massive open online course.

As indicated by participants' comments, time and technology are somewhat intertwined when considering the challenges related to developing and teaching a MOOC. Their professional identities are no longer only tied to their expertise in their fields; their identities may also be tied to the quality of a video or other media, which may not be an area of expertise for them.

### **Implications for Other Types of Courses**

Participants discussed how MOOCs changed (or would change) the way they taught other courses, particularly face-to-face classes. For example, Participant 7 stated:

I think rather that I have, for me, personally come to the conclusion that everything I say in a class should be available for a learner in an online version as well. ... I feel that the way I used to teach—I would do slides and put those slides up—that I won't do in the future, but rather I will prepare a course almost MOOC style by recording videos beforehand with me sort of teaching into the camera and then use that as a basis for people to fall back on later in the course.

Teaching a MOOC caused several participants to rethink ways of teaching in their face-to-face courses.

## **Discussion**

Some of the participants' experiences are consistent with existing accounts of teaching MOOCs. For example, several participants mentioned teaching a MOOC for altruistic reasons, a finding that is consistent with the literature. In terms of differences, although flexibility is often viewed as a boon for online courses, in the case of MOOCs, flexibility was challenging for some participants. Participant 2 mentioned not knowing when the course actually stopped. These issues are consistent with Comer's (2014) reflective account of teaching a MOOC. There was a constant feeling that the professor needed to respond because people were accessing the course at various times, and Participant 2 in the current study had a similar experience. Because some MOOCs can remain open, people can participate and post to forums at their leisure. For the professor of the course, there may be a feeling that s/he must check in with the course to respond to people who find and engage with the MOOC after the "official" offering is done. This finding is particularly interesting in light of recent data indicating that when MOOCs are run multiple times, the enrollment has often been 25% smaller than the original course offering (Chuang & Ho, 2016). Depending on the original enrollment numbers, however, 25% could still be a significant amount of students. Just as

Participant 2 expressed reservations about the ambiguity around some MOOC offerings, other instructors could have similar concerns. For example, there may be financial or time-related implications associated with offering another iteration of a MOOC. Also, there are challenges related to the social construction of the course experience because of participation inconsistencies. Even though MOOCs can be accessed at any time, many of them are still developed according to traditional academic timelines, so MOOC instructors are sometimes in a liminal position, not quite in a traditional academic timeframe, but not quite out of one either.

Evidence-based information from faculty members who create and teach MOOCs will add to the conversation about online learning and higher education. Courses in general can be created by one person or group and delivered by another person or group, and as the area of MOOCs in higher education is still relatively new, understanding the experiences of those who create and teach MOOCs will help establish a foundation for future conversations about others who create and teach MOOCs, those who only create MOOCs, those who only teach MOOCs, and the like. As the data show, instructors commit a great deal of time to offering MOOCs, and although it is largely a personal choice to do so, as these courses contribute to institutional image and enrollment, understanding what it takes to create a MOOC is an important endeavor. Instructors' insights could also inform policies and practices related to massive open online courses. Some of the data on MOOCs is student driven and quantitative simply because of the "massive" number of students in these courses. The data on students in these courses is extremely important; however, content on faculty members' experiences with MOOCs is also valuable. A qualitative study on faculty members and MOOCs is informative for higher education administrators, other faculty members, and third-party MOOC providers.

Although extant literature broaches the subject of instructors' motivations for offering MOOCs (i.e., Hew & Cheung, 2014), the current study also indicated some of the challenges and concerns professors have related to MOOCs. The time and effort it takes to develop and teach a MOOC cannot be overstated, and as Blancato and Iwertz (2016) noted, students often have particular expectations for their MOOC experience, sometimes based on stories about interaction or the lack thereof in these courses. Furthermore, these experiences, too, are socially constructed by faculty and MOOC participants, and are also guided by various perceptions of what it means to be involved in these courses. Time and effort are often empirically discussed as critical components of the MOOC experience for participants, but the current study empirically confirmed that time and effort are concerns for MOOC faculty as well. Several participants noted that the time commitment for MOOCs is quite high, and although many professors gladly chose to teach MOOCs and would consider teaching a MOOC again, there are challenges related to the time it takes to create and deliver these courses. For the current participants in particular, who were tenure-track or tenured professors, MOOCs have serious implications for teaching, research, and service. These challenges related to time could be present for other tenure track or tenured professors, as well as other categories of instructors like adjuncts. Opportunities for developing and delivering MOOCs should be open to instructors from various backgrounds at various points in their careers, so understanding more about instructors' experiences with MOOCs, such as the data the current study provided, will add to a necessary conversation that is directly connected to the future of MOOCs in higher education.

## Implications and Conclusion

Future researchers could investigate different types of instructors' experiences with MOOCs, as the current study addressed the experiences of tenure track or tenured professors. The findings for the current study have implications for higher education institutions, third-party MOOC providers, researchers, faculty, and MOOC participants. Institutions who offer MOOCs or those who have professors, instructors, etc. offering MOOCs, could make a greater effort to track whether or not the contact that participants have with institutions via the MOOCs results in any additional interest in other programs offered by the institution. For institutions that partner with third party providers, there may also be opportunities to connect with those providers to gather data related to the impact MOOCs have on admissions or interest in those institutions. Institutional researchers could connect with MOOCs associated with their institutions to learn more about any potential benefits MOOCs have for those colleges or universities. MOOC faculty and participants can use the data from the current study to explore more intentional ways of socially constructing the MOOC experience. Recognizing the benefits and challenges of MOOCs before beginning the process can help both faculty and participants create a richer, more interactive experience. As more people decide to receive MOOC certificates, like the 60% of users mentioned in Chuang and Ho's (2016) text, understanding the relationship between MOOCs and institutional enrollment could become the next phase of MOOC research, particularly if some institutions consider accepting the credential as a part of prospective students' application packets.

Although some faculty members may be excited about and prepared for teaching MOOCs, others may feel pressured to create massive open online courses. Any efforts to continue MOOCs should include conversations about the many benefits associated with MOOCs and the many challenges connected to these courses as well so that administrators, participants, and instructors understand the various components MOOC creation and delivery include. Knowing more about faculty members' experiences with MOOCs through qualitative, quantitative, and mixed methods studies could help improve the process of creating, teaching, and administering these courses.

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